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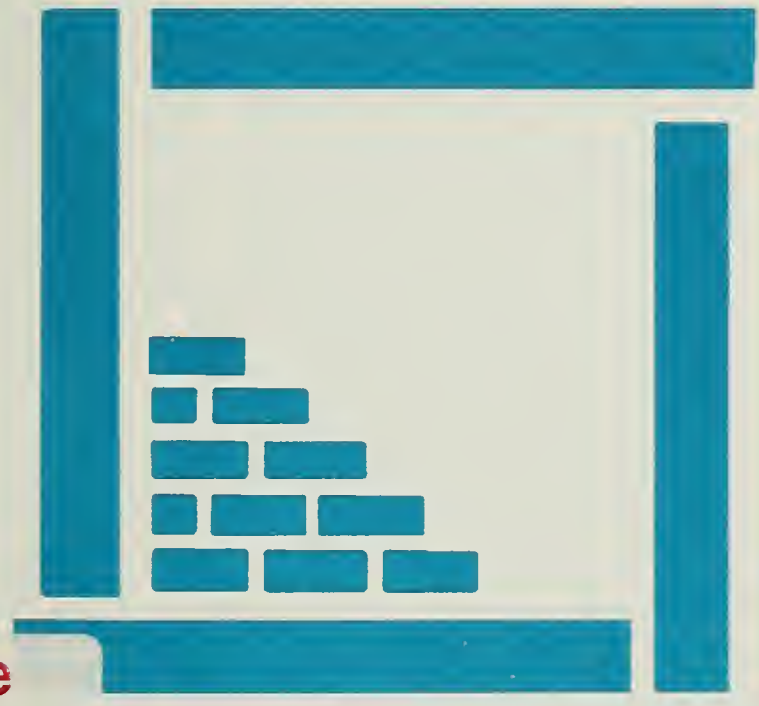
Census of Construction Industries

CC87-I-2

INDUSTRY SERIES

**General Contractors—
Residential Buildings,
Other Than Single-Family**

Industry 1522



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ACKNOWLEDGMENTS

Many persons participated in the various activities of the 1987 Census of Construction Industries.

The overall planning and review of the census operations were performed by the staff of the Office of the Assistant Director for Economic and Agriculture Censuses.

This report was prepared in the Construction Statistics Division. **Barry A. Rappaport**, Assistant Division Chief for Industry Surveys, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **A. William Visnansky**, Chief, Census Operations Branch, with primary staff assistance by **Juliana Van Berkum**, **Barbara J. Hadden**, **Edward R. Glover**, **Susan L. Hostetter**, **Shirley M. Baker**, and **Carolyn J. Stone**. Under the direction of **Jesse Pollock**, **Edward K. Ricketts** and **Dennis K. Duke** developed the sampling plans and variance and estimation specifications.

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If you have any questions concerning the statistics in this report, call (301) 763-7546.

1987

Census of Construction Industries

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INDUSTRY SERIES

General Contractors— Residential Buildings, Other Than Single-Family

Industry 1522

Issued January 1990



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PURPOSE AND USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source of facts about the structure and functioning of the Nation's economy. They provide essential information for government, business, industry, and the general public.

Economic censuses furnish an important part of the framework for such composite measures as the gross national product, input-output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policy-making agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries, and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic censuses every 5 years, covering years ending in 2 and 7. The 1987 Economic Censuses consist of the—

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1987 Census of Agriculture and 1987 Census of Governments are conducted separately.) The next economic censuses are scheduled to be taken in 1993 covering the year 1992.

AVAILABILITY OF THE DATA

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office, and on microfiche, computer tape, compact discs with read-only memory, and flexible diskettes, for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Census Bureau, Washington, DC 20233. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State and Business and Industry Data Centers in many States also supply economic census statistics.

WHAT'S NEW IN 1987

Several changes have taken place for the 1987 censuses. Data will be reported on the basis of the newly revised Standard Industrial Classification (SIC) system with selected reports including "bridge tables," linking the old and new classification systems. A new set of metropolitan

areas has been adopted, and more detailed information will be available for businesses with no paid employees. For additional information on these changes, review the subsequent text.

One important change involves receipts of contractors and builders. Prior to 1987, the Census of Construction Industries collected receipts as the primary measure of construction activity. For 1987, the census collected the "value of construction work done" to better measure actual construction activity done during the year. Differences between the two concepts occur when work is done in one year and payment received either from the prior or in the succeeding year. In addition, receipts do not include work a contractor performs for its own account and use.

HISTORICAL INFORMATION

The economic censuses have been taken together as an integrated program at 5-year intervals since 1967, and before that for 1963, 1958, and 1954. Prior to that time, the individual censuses were taken separately at varying intervals.

The economic censuses trace their beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 manufactures census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade, and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 economic censuses were the first to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. These were the first censuses to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records have also been used to provide basic statistics as well for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic censuses, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The Census of Construction Industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The Census of Transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 are publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in

other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic censuses in 1972 along with the Survey of Women-Owned Businesses.

Economic censuses have also been taken in Puerto Rico since 1909, in the Virgin Islands and Guam since 1958, and in the Northern Mariana Islands since 1982.

Statistical reports from the 1982 and earlier censuses provide historical figures for the study of long-term time series, and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the censuses provide complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Construction Reports* (building permits, housing starts, and value of new construction put in place), *Current Business Reports* (retail and wholesale trade and service industries), the *Annual Survey of Manufactures*, *Current Industrial Reports*, and the *Quarterly Financial Report*. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the censuses. The *County Business Patterns* program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1987 Economic Censuses and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1987 Economic Censuses*. Contact Customer Services for information on availability.

CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1987 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property

into lots as defined in the 1987 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction—The SIC manual defines construction in three broad types of activity that follow:

1. **Building construction by general contractors or by operative builders**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors**—Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors**—These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

In addition to the industries classified in the SIC manual as Construction, this census also includes one industry

classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. These establishments are engaged in subdividing real property into lots and in developing it for sale on their own account.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1987. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

A revised edition of the SIC Manual was issued in 1987. Minor modifications were made to three industries in the construction sector: SIC 1611, Highway and Street Construction Contractors, Except Elevated Highways; SIC 1629, Heavy Construction Contractors, N.E.C.; and SIC 1771, Concrete Work Special Trade Contractors. The extent of these modifications are explained in the specific texts for those industries. "Bridge tables" are also included showing selected data tabulated using both the previous classification system and the 1987 revision.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1987. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

¹Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

If an establishment engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1987 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1987 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The companies included in the 1987 Census of Construction Industries were identified as part of an operation common to all 1987 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government.

Employer Companies

Developing the sampling frame for employer companies—This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative records data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1987 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1987 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

Selecting the employer sample—The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with estimated total employment of 20 employees or more, and a probability sample of single-establishment companies with estimated employment of fewer than 20 employees.

Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 533,000 single-establishment employer companies initially classified as construction companies, 147,000 were included in the sample. All of the 13,000 establishments of multiestablishment companies were included in the sample. There was a net increase in the sample of 60,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan

area or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

Estimation procedures for 1987 and 1982 data—Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1987 and 1982 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c} / p_i$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the

sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1987 Census of Construction Industries was obtained from employer establishments primarily through the use of twenty-four questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179 and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and appropriate advisory groups. The Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1987 census report forms were mailed out in December 1987. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1988.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all

revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1987 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical locations of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries, results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1987 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, land receipts are also subtracted from dollar value of business done.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1987 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, DC, 20233.

To discuss a special tabulation before submitting specifications, call 301-763-7546.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1987 Census of Construction Industries are not the same as the data published in the Census Bureau’s monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities and communications, for example), both as “force account” construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the Census of Construction.

Data contained in the reports of the census of construction industries may also differ from industry data in “Employment and Earnings Statistics,” published by the Bureau of Labor Statistics, and “Statistics of Income,” published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others, and costs for materials, components, supplies, and fuels. In SIC’s 1531 and 6552, land receipts are also subtracted from dollar value of business done. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- (X) Not applicable.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employment size	By size class of dollar value of business done	By type, class, ownership, kind of business, and location of construction ¹	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment.....	3					
End of year—total.....	1, 3	1	5	6		
End of year—buildings, machinery and equipment.....	3					
Depreciation charges during year—buildings, machinery and equipment.....	3					
Capital expenditures:						
Total capital expenditures.....	1, 3	1	5	6		
New buildings—machinery and equipment.....	3					
Used buildings—machinery and equipment.....	3					
Communication services, costs for.....	2					
Employees:						
All employees—average number.....	1, 2	1	5	6		8
Construction workers—average number.....	1, 2, 9	1, 9				
Other employees—average number.....	2					
Employer costs for fringe benefits—legally required and voluntary expenditures.....	2					
Establishments—number in business during year.....	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total.....	1, 2, 9	1, 9	5	6		
Quarterly.....	2, 9	9				
Inventories.....	4					
Materials, components, supplies, and fuels—costs for.....	1, 2	1	5	6		
Payroll:						
First quarter, all employees.....	2					
Annual:						
All employees.....	1, 2	1	5	6		8
Construction workers.....	1, 2	1				
Other employees.....	2					
Power, fuels, and lubricants—costs for.....	2					
Proprietors and working partners.....	2					
Ratios, State.....	13	13				
Value and receipts:						
Dollar value of business done, total.....	2		5	6	11	
Value of construction work, total.....	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others.....	2					
Other business receipts and land receipts ²	2					
Net value of construction work.....	1, 2	1	5	6		8
Value added.....	1, 2	1	5	6		8
Rental costs:						
Total.....	1, 2	1	5	6		
For machinery and equipment.....	2					
For buildings.....	2					
Repairs to buildings and other structures.....	2					
Repairs to machinery and equipment.....	2					
Selected industry ratios.....	12					
Subcontract work to others, costs for.....	1, 2	1	5	6		8

Note: Data for 1982 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work. Ownership—private or government owned.

²Land receipts are shown separately for SIC's 1531 and 6552 only.

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General Contractors—Residential Buildings, Other Than Single-Family

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in the construction of apartment buildings, hotels, motels, and dormitories (including new work, additions, alterations, remodeling, and repair). For additional examples, refer to the 1987 Standard Industrial Classification (SIC) Manual published by the Office of Management and Budget, Executive Office of the President.

During 1987, the establishments with paid employees classified in this industry accounted for \$13.6 billion in total dollar value of business. Of this amount, \$13.3 billion were for the value of construction work. These establishments paid out \$2.8 billion for materials, components, and supplies and \$7.1 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for this industry were \$80.0 million. Value added for 1987 was \$3.7 billion.

There were 8,143 establishments with total employment averaging 81,708 during the year. Total payroll for 1987 was \$1.8 billion. Total hours worked by construction workers during the year were 98.5 million hours.

Larger establishments with 20 employees or more, while representing only 11 percent of the total number of employer establishments in this industry accounted for 64 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have excluded the value of work in progress during the calendar year. Receipts may have also excluded work done by builders engaged in construction for sale on their own account or for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

Figure 1. **Value of Construction Work by Type of Construction**
(Percent)

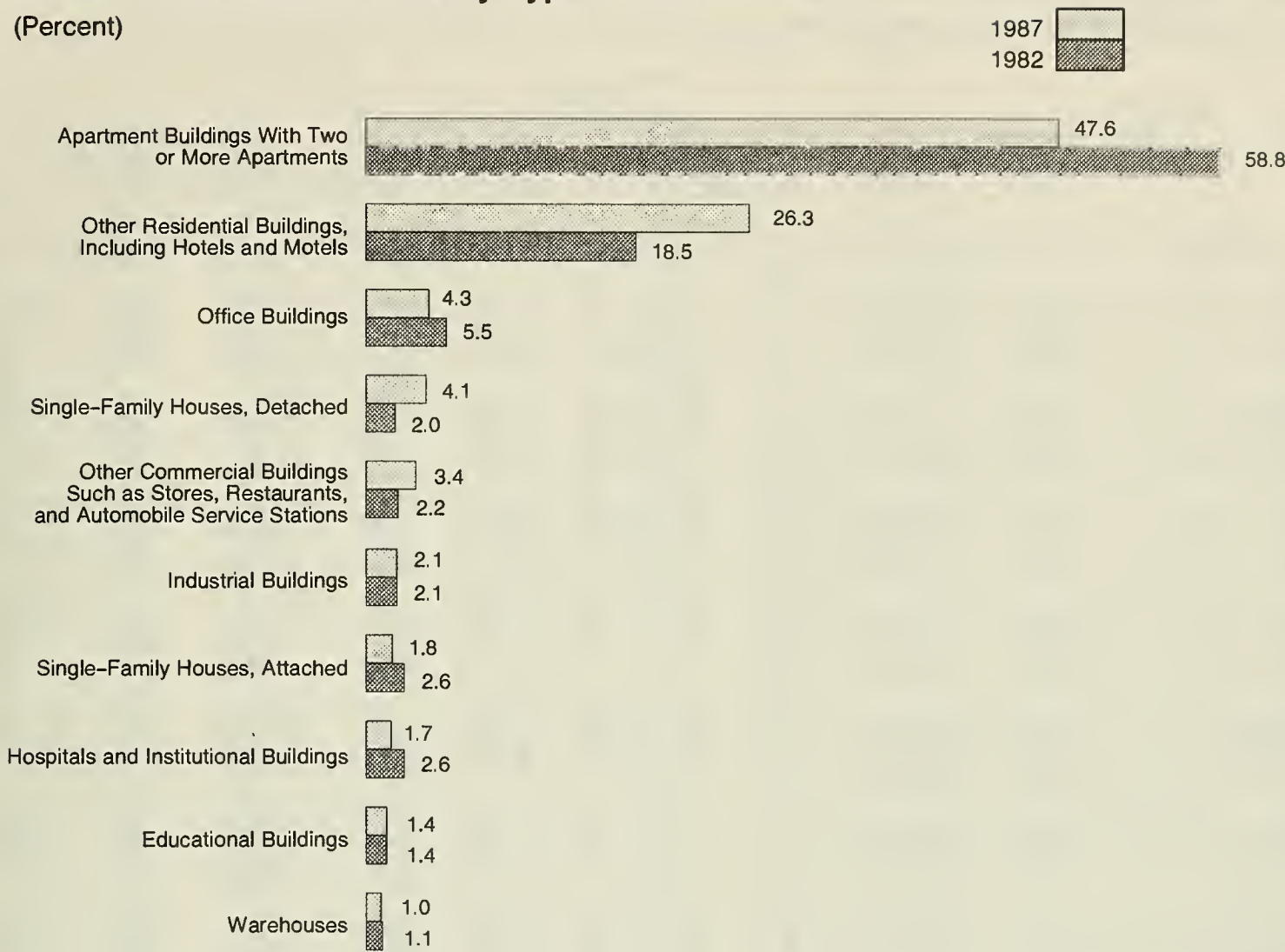


Figure 2. **Selected Costs Per Dollar Value of Business Done**
(Percent)

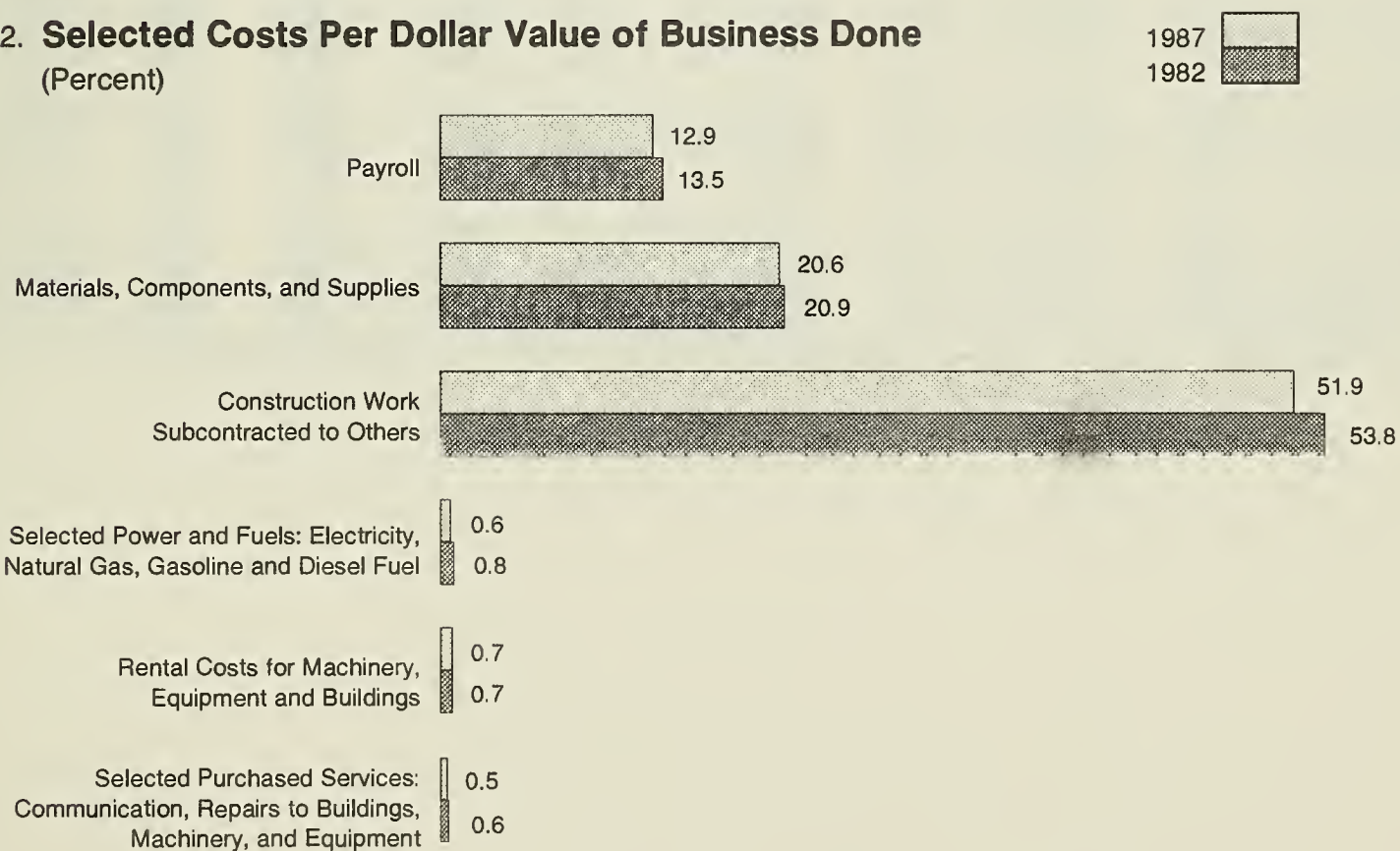


Table 1. General Statistics for Establishments With Payroll by State: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1987							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States -----	8 143	81 708	61 245	1 751 693	1 130 329	98 455	13 315 544	6 257 443
Alabama -----	69	532	409	8 829	5 923	612	85 780	45 097
Alaska -----	12	185	154	5 845	3 364	225	29 761	16 117
Arizona -----	81	1 278	803	29 994	17 870	1 518	381 213	104 099
Arkansas -----	43	419	310	6 900	4 125	463	54 947	34 747
California -----	1 134	10 971	8 515	251 762	167 398	12 436	2 011 150	869 308
Colorado -----	100	987	649	26 358	13 804	1 199	251 154	96 762
Connecticut -----	199	1 540	1 183	37 229	20 807	1 739	304 677	164 073
Delaware -----	53	510	260	7 971	3 876	436	48 994	21 091
District of Columbia -----	7	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Florida -----	422	6 936	5 305	137 497	90 724	9 085	1 042 664	457 318
Georgia -----	170	1 842	1 321	36 353	21 927	1 912	266 475	129 667
Hawaii -----	28	2 621	2 049	92 196	69 758	3 837	627 441	268 267
Idaho -----	*15	(S)	(S)	(S)	(S)	(S)	(S)	(S)
Illinois -----	264	2 489	1 629	66 147	37 417	2 412	355 627	144 358
Indiana -----	164	1 574	1 207	31 892	21 591	1 881	210 382	118 296
Iowa -----	54	472	389	7 838	5 611	605	59 658	33 925
Kansas -----	49	460	389	8 557	6 071	685	86 522	30 418
Kentucky -----	113	990	814	16 044	10 539	1 231	105 280	59 305
Louisiana -----	74	658	493	11 241	7 517	1 014	77 240	44 035
Maine -----	85	787	648	16 084	10 210	850	103 294	60 960
Maryland -----	226	2 373	1 930	47 579	32 966	3 039	380 352	191 432
Massachusetts -----	338	3 985	2 783	117 329	70 085	5 081	885 953	364 578
Michigan -----	233	1 802	1 325	34 514	22 373	2 218	213 441	130 978
Minnesota -----	109	1 022	726	31 630	19 556	1 466	277 994	127 471
Mississippi -----	50	436	356	5 885	3 681	522	66 271	30 197
Missouri -----	196	1 271	1 016	22 205	15 618	1 564	205 348	107 055
Montana -----	28	160	121	3 160	1 922	163	32 855	16 078
Nebraska -----	16	176	133	3 963	2 242	195	27 567	11 410
Nevada -----	51	676	576	23 486	15 024	1 076	236 989	62 274
New Hampshire -----	113	1 232	991	24 596	16 920	1 730	143 207	84 274
New Jersey -----	391	2 477	1 901	56 239	37 492	3 193	336 878	192 130
New Mexico -----	23	(S)	(S)	(S)	(S)	(S)	(S)	(S)
New York -----	725	6 378	4 713	136 312	86 078	7 440	943 638	477 256
North Carolina -----	220	2 492	1 927	39 938	27 248	3 297	327 687	163 453
North Dakota -----	26	307	235	6 326	4 115	480	52 419	28 321
Ohio -----	319	3 447	2 320	65 327	41 583	3 437	437 647	227 928
Oklahoma -----	42	250	179	3 507	1 910	*200	28 203	13 034
Oregon -----	120	837	653	13 202	8 560	664	96 020	45 819
Pennsylvania -----	427	3 113	2 407	52 838	36 506	3 957	294 118	176 073
Rhode Island -----	47	352	237	8 770	5 278	502	84 692	32 615
South Carolina -----	66	1 300	1 050	23 915	14 641	1 810	199 197	95 037
South Dakota -----	9	329	278	4 472	3 055	497	55 778	29 637
Tennessee -----	134	1 954	1 530	39 716	27 381	2 817	400 517	191 827
Texas -----	315	3 049	2 182	58 158	31 729	3 217	476 460	237 476
Utah -----	70	283	203	4 735	3 275	331	32 014	24 900
Vermont -----	71	409	306	6 810	4 678	335	45 988	28 679
Virginia -----	187	2 421	1 582	43 516	25 233	2 692	340 988	166 971
Washington -----	228	1 586	1 208	29 770	20 726	1 651	258 313	136 693
West Virginia -----	41	302	235	4 575	3 220	334	25 915	16 287
Wisconsin -----	146	1 694	1 325	35 520	24 986	2 043	266 351	123 278
Wyoming -----	*18	*107	*95	*1 647	*1 472	60	10 690	7 538

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
3 658 560	2 876 331	7 058 100	94 009	92 709	663 184	62 702	7 846 146	1 950 601	1	1	4	U.S.
24 498	21 745	40 683	758	*1 019	6 226	1 265	138 306	40 531	13	11	42	AL
9 926	7 959	13 643	191	102	850	(S)	(S)	(S)	16	11	26	AK
64 659	47 454	277 114	1 709	1 417	15 326	945	180 273	39 658	8	4	15	AZ
23 019	11 798	20 200	326	880	7 314	463	52 624	21 816	16	10	10	AR
560 032	336 924	1 141 841	14 495	7 270	69 525	4 233	507 644	131 883	4	4	10	CA
52 584	48 377	154 392	1 607	701	9 849	1 612	161 744	45 843	9	8	22	CO
103 462	62 500	140 604	1 519	3 406	11 582	723	101 791	27 886	8	10	22	CT
15 676	10 632	27 903	164	*782	10 262	211	15 586	5 053	20	24	60	DE
(S)	(S)	(S)	(D)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	DC
248 104	234 545	585 346	9 271	5 286	32 569	7 800	1 041 509	262 230	6	4	13	FL
88 981	52 860	136 808	1 741	1 493	10 892	1 973	328 176	58 447	7	6	15	GA
129 294	(D)	359 173	2 868	4 439	17 893	1 925	296 046	90 411	2	1	4	HI
(S)	(D)	(S)	(S)	(S)	(D)	131	18 628	5 615	(S)	(S)	(S)	ID
94 023	62 820	211 268	2 226	2 172	28 692	2 782	346 589	87 872	7	6	26	IL
57 419	62 606	92 086	910	1 305	8 427	1 114	107 702	36 910	8	13	31	IN
15 625	19 423	25 733	356	*437	4 413	583	66 883	16 834	22	17	61	IA
13 296	17 467	56 104	181	1 000	3 739	426	61 799	6 907	13	11	35	KS
36 244	24 693	45 974	768	1 239	5 586	687	58 877	16 707	13	11	35	KY
22 880	(D)	33 205	*640	250	3 719	1 382	181 704	58 359	18	15	34	LA
33 702	(D)	42 334	863	725	4 614	573	45 153	14 616	12	15	33	ME
118 978	76 257	188 920	2 285	1 132	8 657	1 516	241 390	47 254	7	4	26	MD
210 180	172 195	521 375	7 873	7 563	56 236	1 845	240 080	59 524	4	5	19	MA
74 627	59 853	82 463	961	2 191	9 821	1 310	169 463	41 864	10	7	23	MI
69 102	63 876	150 522	1 592	1 654	14 322	1 001	109 684	26 902	8	7	36	MN
18 085	12 215	36 074	537	179	3 207	597	47 806	17 299	24	20	25	MS
46 160	64 994	98 292	799	1 630	9 987	919	80 112	19 348	13	17	40	MO
*9 678	8 123	16 777	59	46	(D)	112	8 739	4 496	27	31	25	MT
5 199	(D)	16 156	73	230	1 358	(D)	18 179	4 839	29	28	18	NE
32 744	29 564	*174 714	847	1 009	5 817	(D)	115 115	43 538	11	10	28	NV
50 741	36 124	58 933	921	3 770	10 652	377	29 342	10 323	10	7	33	NH
113 019	88 292	144 747	3 394	2 592	14 468	1 055	119 537	35 185	8	8	23	NJ
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(S)	NM
321 663	195 811	466 382	8 092	5 049	38 150	4 420	557 187	127 680	5	5	19	NY
86 421	84 159	164 233	2 728	2 915	12 555	1 796	194 522	41 420	8	9	26	NC
17 193	13 153	24 097	*310	230	5 659	232	21 918	6 559	20	18	39	ND
148 958	90 503	209 719	3 471	8 858	67 792	1 463	153 066	43 321	6	7	8	OH
*9 023	4 045	15 169	229	77	*1 608	442	48 292	10 868	24	36	38	OK
22 586	23 928	50 200	497	220	7 565	416	55 240	14 272	15	10	5	OR
115 171	77 461	118 044	1 923	3 844	22 296	1 795	215 640	66 743	8	8	14	PA
18 048	14 770	52 076	336	1 335	3 347	378	35 367	(D)	13	8	7	RI
36 859	59 494	104 159	1 933	1 537	12 295	1 429	160 170	44 659	10	10	16	SC
16 850	(D)	26 141	191	105	1 630	214	21 625	6 060	(W)	(W)	(W)	SD
95 792	98 589	208 690	4 383	1 480	9 942	1 481	158 760	32 854	6	5	18	TN
126 529	113 787	238 983	3 677	1 933	19 750	5 388	771 526	128 981	7	4	11	TX
15 853	13 012	7 114	269	388	2 810	617	60 419	13 898	16	22	36	UT
13 201	15 599	17 309	290	396	2 729	280	25 540	8 221	17	26	5	VT
88 372	85 147	174 016	2 278	4 044	15 569	1 953	208 630	56 253	7	9	24	VA
79 291	63 858	121 620	1 937	1 723	*31 381	561	78 122	17 815	9	8	24	WA
8 993	8 116	9 628	206	*116	1 367	210	11 996	4 685	27	22	42	WV
76 619	55 385	143 073	1 138	2 394	18 920	776	107 814	26 333	8	7	19	WI
4 076	*3 887	3 152	(D)	54	331	177	18 005	6 008	59	40	17	WY

Table 2. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year	8 143	7 464	4 775	7 651	2	1	3	3
Proprietors and working partners	1 545	1 121	2 122	3 600	7	6	6	5
All employees**	81 708	62 702	55 589	112 215	1	1	1	2
Construction workers:								
March	60 123	49 370	40 564	81 890	2	1	1	1
May	61 354	49 973	45 565	91 761	2	1	1	2
August	64 437	50 094	49 938	103 011	1	1	1	2
November	59 098	48 695	46 614	98 502	2	1	1	2
Average	61 245	50 089	45 707	94 627	1	1	1	2
Other employees:								
March	19 813	12 598	9 208	16 479	2	1	2	2
May	20 593	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
August	21 095	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
November	20 315	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Average	20 462	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March	23 537	20 006	(NA)	(NA)	2	1	(NA)	(NA)
April to June	25 039	20 829	(NA)	(NA)	2	1	(NA)	(NA)
July to September	25 668	20 846	(NA)	(NA)	2	1	(NA)	(NA)
October to December	24 209	20 598	(NA)	(NA)	2	1	(NA)	(NA)
Total hours worked	98 455	82 280	(NA)	(NA)	2	1	(NA)	(NA)
Payroll, all employees	1 751 693	1 077 525	646 375	977 707	1	1	1	1
Payroll, construction workers	1 130 329	759 607	484 890	771 876	1	1	1	1
Payroll, other employees	621 364	317 917	161 485	205 831	1	1	2	1
First quarter payroll, all employees	398 783	258 097	135 285	(NA)	1	1	1	(NA)
Employer costs for fringe benefits, all employees	354 377	201 018	119 442	(NA)	1	1	1	(NA)
Legally required expenditures	264 878	147 823	74 468	(NA)	2	1	1	(NA)
Voluntary expenditures	89 499	53 194	44 974	(NA)	2	1	1	(NA)
Dollar value of business done	13 592 992	7 953 314	4 514 747	6 525 533	1	1	1	1
Value of construction work ¹	13 315 544	7 846 146	4 442 110	6 407 131	1	1	1	1
Value of construction work subcontracted in from others	707 613	291 813	110 648	189 919	6	6	3	4
Land receipts ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts	277 448	107 167	72 637	118 402	5	2	5	4
Net value of construction work†	6 257 443	3 570 085	2 202 760	3 033 312	1	1	1	1
Value added††	3 658 560	1 950 601	1 144 584	1 561 851	1	1	1	2
Selected costs	9 934 432	6 002 712	3 370 163	4 963 682	1	1	1	1
Materials, components, and supplies ³	2 796 294	1 659 617	1 084 421	1 589 863	2	1	1	2
Construction work subcontracted to others	7 058 100	4 276 061	2 239 350	3 373 819	2	1	1	1
Selected power, fuels, and lubricants	80 036	67 033	46 392	(NA)	2	1	2	(NA)
Electricity	19 832	26 954	10 100	(NA)	2	1	4	(NA)
Natural gas	2 867	3 063	4 350	(NA)	4	3	2	(NA)
Gasoline and diesel fuel	52 123	31 850	22 312	(NA)	2	2	2	(NA)
On highway use	46 602	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use	5 521	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
Other, including lubricating oils and greases	5 213	5 165	9 629	(NA)	4	4	2	(NA)
Rental cost for machinery, equipment, and buildings	94 009	54 779	34 448	(NA)	2	1	1	(NA)
For machinery and equipment	60 878	41 837	28 570	40 597	3	1	1	2
For buildings	33 131	12 942	5 878	(NA)	3	2	2	(NA)
Selected purchased services	73 069	47 462	33 389	(NA)	2	1	2	(NA)
Communication services	31 584	19 252	14 717	(NA)	2	2	2	(NA)
Repairs to buildings and other structures	4 827	3 711	4 291	(NA)	8	5	11	(NA)
Repairs to machinery and equipment	36 658	24 499	14 381	(NA)	3	2	2	(NA)
Ownership of construction projects:								
Value of construction work ¹	13 315 544	7 846 146	4 442 110	6 407 131	1	1	1	1
Government owned	1 580 470	1 220 146	1 009 153	1 164 604	3	3	1	1
Federal	578 916	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
State and local	1 001 554	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Privately owned	11 735 073	6 626 000	3 432 597	5 242 527	2	1	1	1

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

²Data were collected separately for establishments classified in SIC 1531, Operative Builders, and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

³For 1972, includes data for power, fuels, and lubricants.

Table 3. **Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets	636 639	512 564	3	2
Capital expenditures, other than land	92 709	88 359	4	2
New	68 086	67 143	4	1
Used	24 622	21 216	6	4
Retirements and disposition of depreciable assets	66 164	50 243	5	5
End-of-year gross book value of depreciable assets	663 184	550 680	3	1
Depreciation charges during year	76 844	61 104	4	1
Buildings and other Structures, Additlons, and Related Facilities				
Beginning-of-year gross book value of depreciable assets	206 835	188 073	9	3
Capital expenditures, other than land	22 191	37 917	8	2
New buildings and other structures	12 633	31 769	9	1
Used buildings and other structures	9 557	6 148	13	10
Retirements and disposition of depreciable assets	18 095	33 229	14	7
End-of-year gross book value of depreciable assets	210 932	192 762	9	2
Depreciation charges during year	15 059	12 928	4	2
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets	429 803	324 490	2	1
Capital expenditures, other than land	70 517	50 441	4	3
New machinery and equipment, including automobiles and trucks	55 453	35 374	5	3
New automobiles and trucks, intended primarily for highway use	28 623	17 436	5	4
Used machinery and equipment, including automobiles and trucks	15 064	15 067	6	5
Retirements and disposition of depreciable assets	48 069	17 014	3	4
End-of-year gross book value of depreciable assets	452 252	357 917	2	1
Depreciation charges during year	61 785	48 176	5	2

Table 4. Value of Inventories for Establishments With Payroll: 1987 and 1986

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	8 143	2
Value of construction work	13 315 544	1
Establishments with inventories:		
Number	3 213	4
Value of construction work	5 087 158	3
Inventories ¹ :		
End of 1987, materials and supplies	48 962	13
End of 1986, materials and supplies	54 076	6
Establishments with no inventories:		
Number	3 997	4
Value of construction work	6 477 559	3
Establishments not reporting:		
Number	933	7
Value of construction work	1 750 827	3

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
1987											
Number of establishments -----	8 143	4 482	1 726	1 022	681	148	63	15	2	1	
All employees** -----	81 708	8 854	11 343	13 790	19 839	10 211	9 184	5 316	3 167	(D)	
Payroll, all employees -----	1 751 693	140 658	203 043	268 784	417 073	261 964	234 027	226 142	(D)	(D)	
Construction worker hours (thousands) -----	98 455	9 030	12 730	16 380	24 602	13 844	12 136	5 388	4 342	(D)	
Dollar value of business done -----	13 592 992	1 256 999	1 518 684	2 084 075	3 349 191	2 090 360	1 863 098	1 430 582	(D)	(D)	
Value of construction work ¹ -----	13 315 544	1 223 349	1 487 680	2 036 435	3 280 403	2 054 702	1 807 609	1 425 363	(D)	(D)	
Net value of construction work† -----	6 257 443	676 060	792 570	1 056 584	1 509 103	887 548	769 444	566 132	(D)	(D)	
Value added†† -----	3 658 560	400 766	449 433	624 506	868 646	494 138	499 708	321 360	(D)	(D)	
Cost of materials, components, supplies, and fuels -----	2 876 331	308 943	374 139	479 718	709 245	429 067	325 225	249 991	(D)	(D)	
Cost of construction work subcontracted to others -----	7 058 100	547 289	695 110	979 850	1 771 299	1 167 154	1 038 165	859 231	(D)	(D)	
Rental cost for machinery, equipment, and buildings -----	94 009	8 168	9 315	15 849	23 084	13 110	13 178	11 303	(D)	(D)	
Capital expenditures, other than land -----	92 709	11 334	11 032	19 048	23 665	6 979	7 615	13 034	(D)	(D)	
End-of-year gross book value of depreciable assets -----	663 184	79 244	78 641	130 191	145 205	65 705	64 863	99 332	(D)	(D)	
1982											
All employees** -----	62 702	(S)	7 214	9 119	12 870	11 468	8 390	4 759	(D)	(D)	
Total construction receipts ¹ -----	7 846 146	(S)	658 003	1 017 759	1 845 153	1 574 707	1 372 504	593 648	(D)	(D)	
Value added†† -----	1 950 601	(S)	207 861	270 970	431 558	377 365	242 240	175 641	(D)	(D)	
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	4	5	4	3	2	2	(W)	(W)	(D)	
Net value of construction work† -----	1	6	5	4	2	1	1	(W)	(D)	(D)	
Capital expenditures, other than land -----	4	13	14	13	6	2	(W)	(W)	(D)	(D)	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments -----	8 143	(S)	(S)	(S)	1 928	1 398	954	1 134	433	270	248
All employees** -----	81 708	(S)	(S)	(S)	5 878	7 270	8 351	15 213	9 773	8 973	23 688
Payroll, all employees -----	1 751 693	(S)	(S)	(S)	74 264	112 434	135 559	278 054	221 244	214 377	691 212
Construction worker hours (thousands) -----	98 455	(S)	(S)	(S)	6 570	8 291	10 548	18 790	11 455	11 139	29 378
Dollar value of business done -----	13 592 992	(S)	(S)	(S)	321 077	508 353	681 764	1 782 942	1 550 701	1 897 911	6 764 413
Value of construction work ¹ -----	13 315 544	(S)	(S)	(S)	314 711	494 606	656 984	1 737 500	1 514 659	1 865 065	6 648 436
Net value of construction work† -----	6 257 443	(S)	(S)	(S)	239 366	350 818	431 494	1 012 449	805 282	858 682	2 493 720
Value added†† -----	3 658 560	(S)	(S)	(S)	138 399	218 570	280 059	598 267	465 918	487 124	1 426 796
Cost of materials, components, supplies, and fuels -----	2 876 331	(S)	(S)	(S)	107 332	145 994	176 215	459 623	375 405	404 403	1 182 900
Cost of construction work subcontracted to others -----	7 058 100	(S)	(S)	(S)	75 345	143 787	225 489	725 050	709 377	1 006 383	4 154 716
Rental cost for machinery, equipment, and buildings -----	94 009	(S)	(S)	(S)	3 302	4 748	6 418	14 166	11 836	12 239	40 802
Capital expenditures, other than land -----	92 709	(S)	(S)	(S)	5 731	9 930	7 245	15 801	12 996	10 224	29 406
End-of-year gross book value of depreciable assets -----	663 184	(S)	(S)	(S)	36 949	53 230	50 655	110 349	100 109	69 873	229 065
1982											
All employees** -----	62 702	(S)	(S)	(S)	(S)	5 538	6 945	8 317	8 270	7 925	16 954
Total construction receipts ¹ -----	7 846 146	(S)	(S)	(S)	(S)	379 859	555 554	838 468	954 321	1 222 862	3 514 027
Value added†† -----	1 950 601	(S)	(S)	(S)	(S)	138 254	187 442	262 024	253 041	285 718	674 778
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	1	(S)	(S)	(S)	6	6	6	4	3	2	(W)
Net value of construction work† -----	1	(S)	(S)	(S)	6	6	6	5	4	4	(W)
Capital expenditures, other than land -----	4	(S)	(S)	(S)	19	16	14	13	11	9	1

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

¹In earlier censuses construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work ¹				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction ²	Maintenance and repair				
	A	B	C	D	A	B	C	D
1987								
Value of construction work ¹	13 315 544	9 899 515	2 505 802	468 066	1	2	2	6
Building construction	12 657 587	9 806 138	2 395 562	455 886	1	2	3	12
Single-family houses	793 845	623 463	148 383	21 998	3	3	6	9
Single-family houses, detached	550 459	410 225	121 923	18 310	3	3	7	10
Single-family houses, attached	243 385	213 238	26 459	3 688	6	7	8	18
Apartment buildings with two or more apartments	6 337 325	5 032 530	1 036 343	268 451	2	2	4	19
Other residential buildings, including hotels and motels	3 498 516	2 674 785	719 296	104 434	2	2	5	8
Hotels and motels	1 935 923	1 645 952	260 770	29 200	2	2	6	8
Other residential buildings, excluding hotels and motels	1 562 592	1 028 832	458 526	75 233	4	4	7	11
Office buildings	568 310	408 123	145 278	14 908	2	2	6	10
Other commercial buildings such as stores, restaurants, and automobile service stations	458 515	344 167	100 703	13 643	2	3	3	9
Industrial buildings and warehouses	411 569	323 904	72 517	15 147	2	2	4	10
Industrial buildings	274 948	210 470	53 238	11 239	2	2	4	13
Warehouses	136 620	113 433	19 278	3 908	3	3	9	9
Religious buildings	47 792	25 332	19 984	2 475	6	8	8	19
Educational buildings	192 030	133 492	53 511	5 026	1	1	2	11
Hospitals and institutional buildings	226 390	147 742	73 749	4 897	2	2	2	29
Amusement, social, and recreational buildings	65 801	52 955	12 221	624	7	7	20	38
Other nonresidential buildings	57 494	39 645	13 577	4 283	6	6	12	12
Nonbuilding construction	215 796	93 377	110 240	12 179	4	6	2	11
Construction work, n.s.k.	442 159	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
1982								
Value of construction work ¹	7 846 146	6 198 328	1 244 246	403 572	1	1	1	2
Building construction	7 713 199	6 091 219	1 240 681	381 298	1	(W)	1	2
Single-family houses	362 690	253 697	72 809	36 184	2	2	4	5
Single-family houses, detached	156 835	104 203	31 019	21 613	3	4	6	8
Single-family houses, attached	205 854	149 494	41 789	14 570	2	2	4	5
Apartment buildings with two or more apartments	4 611 036	3 672 885	701 628	236 523	1	1	1	3
Other residential buildings, including hotels and motels	1 449 325	1 172 374	219 893	57 058	1	1	4	10
Hotels and motels	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other residential buildings, excluding hotels and motels	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Office buildings	427 581	362 049	54 404	11 128	1	1	3	8
Other commercial buildings such as stores, restaurants, and automobile service stations	172 673	123 917	39 666	9 090	2	2	6	3
Industrial buildings and warehouses	252 778	189 992	43 253	19 533	2	1	3	5
Industrial buildings	165 434	119 199	30 595	15 640	2	2	5	3
Warehouses	87 343	70 793	12 657	3 893	3	3	5	18
Educational buildings	111 100	75 013	30 387	5 700	2	2	3	6
Hospitals and institutional buildings	207 024	149 813	55 063	2 148	(W)	(W)	1	7
Amusement, social, and recreational buildings	63 564	55 512	7 233	818	3	3	9	12
Other nonresidential buildings	55 428	35 967	16 345	3 116	7	6	13	30
Nonbuilding construction	111 541	(D)	(D)	(D)	2	(D)	(D)	(D)
Construction work, n.s.k.	21 406	(D)	(D)	(D)	(W)	(D)	(D)	(D)

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

²In 1982, data for additions, alterations, or reconstruction were collected separately for SIC 1521, 1522, 1531, 1541, and 1542. For all other industries, data are included with "New construction."

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1987

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments	8 143	81 708	1 751 693	13 315 544	8 827 690	6 257 443	3 658 560	7 058 100	1	1	2
Establishments not specializing by type	1 105	15 901	370 295	2 648 136	(NA)	1 200 715	699 006	1 447 421	1	2	2
Establishments specializing 51 percent or more	7 038	65 807	1 381 398	10 667 407	8 827 690	5 056 727	2 959 553	5 610 679	3	1	1
APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS											
All establishments specializing in type	3 413	38 949	805 470	6 732 731	5 677 925	3 062 151	1 758 306	3 670 580	2	2	3
Establishments with —											
100 percent specialization	1 408	16 092	318 943	2 649 200	2 649 200	1 226 462	719 828	1 422 738	3	4	5
90 to 99 percent specialization	482	5 370	108 899	906 179	846 443	387 655	189 540	518 524	5	4	5
80 to 89 percent specialization	346	4 581	96 107	834 997	688 210	368 705	205 970	466 291	6	5	5
70 to 79 percent specialization	395	4 113	99 235	868 144	635 477	342 523	204 275	525 621	5	10	15
60 to 69 percent specialization	398	4 252	95 503	793 176	491 651	384 750	230 827	408 426	5	4	4
51 to 59 percent specialization	382	4 539	86 781	681 033	366 941	352 055	207 864	328 978	6	4	3
HOTELS AND MOTELS											
All establishments specializing in type	528	9 319	247 545	1 824 665	1 333 582	769 790	433 590	1 054 875	4	3	3
Establishments with —											
100 percent specialization	215	2 508	63 105	373 026	373 026	190 759	128 797	182 266	7	9	12
90 to 99 percent specialization	30	952	24 118	244 201	233 622	75 776	37 260	168 424	9	5	4
80 to 89 percent specialization	68	835	18 047	129 411	106 125	57 266	33 574	72 144	8	7	4
70 to 79 percent specialization	97	1 180	25 560	215 004	154 986	88 362	57 125	126 642	23	9	9
60 to 69 percent specialization	67	1 083	24 553	172 205	106 343	90 414	53 474	81 791	16	9	6
51 to 59 percent specialization	49	2 759	92 159	690 816	359 478	267 209	123 357	423 606	3	1	1
OTHER RESIDENTIAL BUILDINGS, EXCLUDING HOTELS AND MOTELS											
All establishments specializing in type	1 795	12 109	245 547	1 563 168	1 273 355	910 559	565 695	652 608	4	4	4
Establishments with —											
100 percent specialization	912	4 901	91 953	510 104	510 104	340 081	225 079	170 023	6	9	10
90 to 99 percent specialization	229	1 649	25 830	151 471	142 149	96 413	50 238	55 057	13	11	12
80 to 89 percent specialization	160	1 012	34 882	246 967	209 105	96 138	63 702	150 829	11	9	9
70 to 79 percent specialization	152	1 418	28 589	197 416	145 702	126 073	56 705	71 343	11	13	14
60 to 69 percent specialization	211	1 783	33 987	243 146	152 400	126 748	80 995	116 398	11	7	5
51 to 59 percent specialization	128	1 344	30 304	214 062	113 893	125 105	88 974	88 956	11	6	6

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
	A	B	C	D	E	F	G
United States	8 143	61 245	98 455	60 123	23 537	61 354	25 039
Alabama	69	409	612	404	139	439	166
Alaska	12	154	225	153	51	188	73
Arizona	81	803	1 518	706	316	788	358
Arkansas	43	310	463	372	136	294	93
California	1 134	8 515	12 436	8 201	2 996	8 027	3 192
Colorado	100	649	1 199	573	241	610	279
Connecticut	199	1 183	1 739	1 089	373	1 225	419
Delaware	53	260	436	250	94	256	100
District of Columbia	7	(S)	(S)	(S)	(S)	(S)	(S)
Florida	422	5 305	9 085	5 170	2 089	5 171	2 332
Georgia	170	1 321	1 912	1 447	534	1 416	525
Hawaii	28	2 049	3 837	2 185	1 021	2 231	1 054
Idaho	*15	(S)	(S)	(S)	(S)	(S)	(S)
Illinois	264	1 629	2 412	1 514	555	1 685	621
Indiana	164	1 207	1 881	1 147	405	1 203	475
Iowa	54	389	605	322	120	369	*143
Kansas	49	389	685	389	165	405	182
Kentucky	113	814	1 231	1 072	406	887	327
Louisiana	74	493	1 014	322	113	435	221
Maine	85	648	850	609	199	667	210
Maryland	226	1 930	3 039	1 934	738	1 983	783
Massachusetts	338	2 783	5 081	2 630	1 166	2 804	1 259
Michigan	233	1 325	2 218	1 184	530	1 339	544
Minnesota	109	726	1 466	643	323	734	363
Mississippi	50	356	522	304	117	399	159
Missouri	196	1 016	1 564	961	379	1 086	391
Montana	28	121	163	127	47	125	42
Nebraska	16	133	195	109	48	115	52
Nevada	51	576	1 076	612	282	533	275
New Hampshire	113	991	1 730	973	407	1 076	484
New Jersey	391	1 901	3 193	1 845	752	2 010	887
New Mexico	23	(S)	(S)	(S)	(S)	(S)	(S)
New York	725	4 713	7 440	4 645	1 783	4 795	1 880
North Carolina	220	1 927	3 297	1 950	811	1 948	838
North Dakota	26	235	480	197	108	210	108
Ohio	319	2 320	3 437	2 475	896	2 264	796
Oklahoma	42	179	*200	158	32	182	*52
Oregon	120	653	664	841	179	518	155
Pennsylvania	427	2 407	3 957	2 186	865	2 437	967
Rhode Island	47	237	502	215	124	211	116
South Carolina	66	1 050	1 810	1 100	492	1 028	427
South Dakota	9	278	497	235	101	304	132
Tennessee	134	1 530	2 817	1 651	800	1 660	775
Texas	315	2 182	3 217	2 332	802	2 264	852
Utah	70	203	331	255	87	172	80
Vermont	71	306	335	270	82	305	88
Virginia	187	1 582	2 692	1 419	560	1 535	676
Washington	228	1 208	1 651	1 285	462	1 188	419
West Virginia	41	235	334	213	59	201	70
Wisconsin	146	1 325	2 043	1 200	468	1 325	509
Wyoming	*18	*95	60	*79	7	(S)	7

¹Construction workers during pay periods including 12th of March, May, August, and November.

Payroll by State: 1987

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
64 437	25 668	59 098	24 210	1	2	2	2	2	2	1	2	2	2	U.S.
424	169	369	136	12	21	14	26	11	20	12	23	16	26	AL
140	55	136	45	17	12	17	13	14	10	19	13	19	15	AK
875	433	843	408	9	16	8	13	10	19	13	22	8	15	AZ
274	108	299	125	14	17	15	14	16	15	21	24	18	29	AR
9 714	3 245	8 125	3 002	4	5	4	4	5	6	3	4	5	7	CA
670	317	742	360	11	17	9	14	10	15	11	18	16	24	CO
1 278	484	1 140	461	8	12	9	12	9	13	8	12	9	13	CT
274	115	262	126	27	37	27	37	27	36	28	38	27	37	DE
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	DC
5 475	2 317	5 404	2 346	6	7	7	7	6	8	6	7	7	7	FL
1 299	442	1 121	410	8	14	8	12	8	12	9	15	10	16	GA
2 038	957	1 742	803	2	3	2	3	2	3	1	3	2	4	HI
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	ID
1 728	665	1 587	569	9	9	8	8	9	9	10	11	10	11	IL
1 327	532	1 150	468	8	12	8	10	8	12	8	12	8	14	IN
459	163	407	*176	24	39	19	34	25	41	23	38	28	43	IA
403	174	360	162	12	21	12	23	13	22	12	20	12	21	KS
663	253	637	244	13	14	16	16	18	16	10	12	11	15	KY
663	*377	551	301	21	32	15	19	23	33	26	41	20	31	LA
667	228	651	212	11	18	11	18	12	18	12	19	11	19	ME
1 915	760	1 888	757	7	9	7	8	8	8	8	10	8	11	MD
2 947	1 337	2 755	1 317	4	6	4	6	5	6	4	6	4	6	MA
1 388	576	1 390	567	11	16	11	15	12	16	12	16	13	17	MI
792	412	737	366	10	11	10	12	10	11	10	11	9	12	MN
378	128	342	118	24	32	25	34	26	33	26	30	24	34	MS
1 067	424	950	367	13	17	13	16	15	16	14	16	13	19	MO
130	45	*101	27	28	27	27	35	22	25	24	27	42	34	MT
121	47	*188	47	34	30	29	31	31	32	32	30	47	29	NE
577	271	582	246	9	19	8	14	10	20	10	22	12	26	NV
973	437	940	401	9	14	9	13	9	14	9	14	10	15	NH
2 020	830	1 731	723	8	10	7	10	8	10	9	11	9	11	NJ
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	NM
4 773	1 912	4 641	1 863	5	7	5	7	5	8	5	7	5	7	NY
1 943	804	1 867	843	9	11	9	12	9	12	10	12	10	15	NC
264	131	268	131	22	23	12	15	14	20	23	24	35	33	ND
2 294	846	2 246	897	7	9	9	13	7	9	7	10	7	11	OH
210	*68	166	*47	20	43	33	39	28	48	15	55	15	53	OK
654	169	599	160	15	16	24	21	11	13	13	17	14	16	OR
2 549	1 087	2 458	1 036	8	11	8	11	8	11	8	11	9	11	PA
261	128	261	133	12	17	13	20	14	20	11	17	10	15	RI
1 074	443	1 000	446	9	9	7	10	12	11	11	8	10	11	SC
288	133	287	129	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	SD
1 491	658	1 321	582	6	8	6	7	6	9	7	8	6	8	TN
2 353	863	1 784	699	8	9	10	10	10	11	8	9	6	7	TX
209	94	179	69	17	20	23	27	16	23	18	21	22	21	UT
306	81	343	82	18	10	15	11	17	13	16	8	27	8	VT
1 837	780	1 537	674	9	12	9	13	10	15	9	12	7	10	VA
1 239	386	1 124	384	9	10	10	12	8	10	10	11	12	11	WA
281	98	246	*105	27	33	28	34	29	34	28	33	31	44	WV
1 443	565	1 333	500	9	11	10	13	10	13	9	12	7	7	WI
*106	21	*77	*23	58	33	67	17	(S)	17	48	29	43	47	WY

Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1987					1982 construction receipts for work done in this State¹	Percent change 1987 (col A) to 1982 (col F)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State¹	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	13 315 544	7 890	11 390 602	1 324	1 924 942	7 846 146	69.7	1	2	2
Alabama -----	115 721	69	76 300	12	39 421	124 812	-7.3	8	12	(W)
Alaska -----	36 812	12	29 761	*14	7 051	29 184	26.1	11	13	11
Arizona -----	458 164	75	331 446	22	126 717	176 419	159.7	4	5	5
Arkansas -----	54 006	42	45 888	*16	8 118	78 703	-31.4	14	17	(W)
California -----	1 876 520	1 101	1 740 886	37	135 634	516 493	263.3	5	5	6
Colorado -----	196 481	94	196 481	-	-	182 845	7.5	6	6	-
Connecticut -----	287 884	187	260 303	35	27 580	104 123	176.5	7	8	5
Delaware -----	32 845	52	22 469	14	10 375	13 645	140.7	25	36	8
District of Columbia -----	60 818	7	2 806	36	58 012	68 155	-10.8	9	13	9
Florida -----	1 086 771	417	971 365	72	115 405	1 117 475	-2.7	3	4	2
Georgia -----	302 460	162	230 665	27	71 794	260 126	16.3	4	5	4
Hawaii -----	627 988	28	(D)	2	(D)	296 324	111.9	1	(D)	(D)
Idaho -----	14 839	*14	*8 802	*26	*6 037	12 434	19.3	40	54	60
Illinois -----	386 312	262	344 694	41	41 617	332 950	16.0	4	5	4
Indiana -----	221 109	158	182 793	24	38 315	113 787	94.3	11	13	(W)
Iowa -----	51 930	54	48 205	7	3 724	39 259	32.3	14	16	6
Kansas -----	95 833	48	53 966	*16	41 866	46 603	105.6	12	9	24
Kentucky -----	107 859	111	73 543	70	34 316	77 195	39.7	16	23	10
Louisiana -----	78 286	73	71 373	7	6 913	185 899	-57.9	10	11	(W)
Maine -----	101 636	77	95 445	4	6 190	50 323	102.0	10	11	(W)
Maryland -----	372 866	212	311 732	46	61 133	148 531	151.0	4	4	11
Massachusetts -----	741 912	321	669 630	23	72 281	240 143	208.9	4	5	4
Michigan -----	226 003	233	199 346	16	26 657	155 396	45.4	5	6	13
Minnesota -----	275 146	108	253 943	15	21 202	134 122	105.1	11	11	18
Mississippi -----	74 987	42	58 680	7	16 307	51 545	45.5	12	15	(W)
Missouri -----	244 312	193	174 960	27	69 352	97 780	149.9	8	12	2
Montana -----	20 278	*24	20 263	*16	*15	16 149	25.6	26	26	66
Nebraska -----	31 368	13	21 148	10	10 220	16 762	87.1	10	15	(W)
Nevada -----	243 158	50	234 421	5	8 737	117 978	106.1	31	32	(W)
New Hampshire -----	147 861	109	113 047	60	34 813	30 929	378.1	8	6	26
New Jersey -----	467 373	379	307 792	43	159 581	128 333	264.2	6	10	1
New Mexico -----	38 712	*18	*8 807	53	29 904	25 709	50.6	16	60	10
New York -----	977 333	724	909 794	48	67 538	553 909	76.4	5	5	20
North Carolina -----	386 395	212	287 854	44	98 540	156 930	146.2	7	9	4
North Dakota -----	33 795	26	33 795	-	-	22 560	49.8	20	20	-
Ohio -----	425 803	308	383 746	59	42 056	124 307	242.5	7	8	8
Oklahoma -----	17 962	32	(D)	2	(D)	74 923	-76.0	19	(D)	(D)
Oregon -----	114 466	118	72 034	43	42 431	36 522	213.4	12	14	23
Pennsylvania -----	349 444	426	274 757	49	74 686	218 035	60.3	7	9	11
Rhode Island -----	56 348	46	42 624	8	13 723	29 394	91.7	6	7	8
South Carolina -----	211 789	66	148 978	42	62 811	196 517	7.8	8	12	4
South Dakota -----	17 288	8	(D)	1	(D)	10 198	69.5	(W)	(D)	(D)
Tennessee -----	280 342	134	260 144	23	20 198	120 113	133.4	4	5	9
Texas -----	338 981	307	289 803	17	49 178	770 693	-56.0	7	8	7
Utah -----	25 178	53	(D)	3	(D)	52 173	-51.7	23	(D)	(D)
Vermont -----	37 625	63	(D)	1	(D)	28 465	32.2	14	(D)	(D)
Virginia -----	406 939	187	326 897	87	80 042	226 089	80.0	6	7	1
Washington -----	273 283	222	219 149	40	54 134	66 843	308.8	7	7	24
West Virginia -----	36 188	40	21 732	*16	14 455	42 959	-15.8	17	20	31
Wisconsin -----	241 087	143	234 428	20	6 659	81 898	194.4	9	10	6
Wyoming -----	7 020	*9	6 163	4	857	43 461	-83.8	11	12	(W)

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 11. **Dollar Value of Business Done for Establishments With Payroll by Kind of Business Activity: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	Dollar value of business done ¹		Relative standard error of estimate (percent)	
	1987	1982	1987	1982
All kinds of business	13 592 992	7 953 314	1	1
General building contractor	11 662 393	6 280 815	1	1
Operative builder	220 332	110 544	3	2
Residential remodeling contractor	803 857	184 070	5	5
Highway and street construction	43 617	47 744	(W)	7
Heavy construction	47 643	51 466	2	4
Subdivider and developer	15 179	9 550	24	30
Carpentry contractor	8 230	31 757	21	8
Concrete construction	10 851	21 561	1	4
Other construction activities	87 241	(S)	16	(S)
Construction management	58 391	341 017	7	1
Real estate agents and managers	36 922	14 537	3	22
Sale of land	35 220	21 623	20	9
Investment builder	59 195	(S)	8	(S)
Other activities	76 971	(S)	6	(S)
Kind of business activity, n.s.k.	426 950	(S)	2	(S)

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 12. Selected Industry Ratios for Establishments With Payroll: 1987 and 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	1987	1982	Relative standard error of estimate (percent) for 1987
AVERAGE PER ESTABLISHMENT			
Number of employees**	10.0	8.4	2
Number of construction workers	7.5	6.7	2
Number of all other employees	2.5	(NA)	2
Payroll, all employees	215.1	144.4	2
Payroll, construction workers	138.8	101.8	2
Payroll, other employees	76.3	42.6	2
Dollar value of business done	1 669.3	1 065.6	2
Value of construction work ¹	1 635.2	1 051.2	2
Cost of materials, components, supplies, and fuels	353.2	231.3	2
Construction work subcontracted to others	866.8	572.9	2
Rental cost for machinery, equipment, and buildings	11.5	7.3	3
Capital expenditures, other than land	11.4	11.8	4
Gross book value of depreciable assets	81.4	73.8	4
AVERAGE PER EMPLOYEE			
Payroll, all employees	21.4	17.2	1
Dollar value of business done	166.4	126.8	1
Value added††	44.8	31.1	1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers	18.5	15.2	1
Value of construction work ¹	217.4	156.6	1
Construction worker hours	1 607.6	1 642.7	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees	30.4	(NA)	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK¹			
Payroll, all employees	.132	.137	1
Cost of materials, components, supplies, and fuels	.216	.220	1
Cost of construction work subcontracted to others	.530	.545	1
Rental cost for machinery, equipment, and buildings	.007	.007	2

¹In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost for machinery, equipment, and buildings
United States -----	10.0	21.4	1 607.6	217.4	.132	.216	.530	.007
Alabama -----	7.7	16.6	1 496.3	209.7	.103	.253	.474	.009
Alaska -----	15.4	31.6	1 461.0	193.3	.196	.267	.458	.006
Arizona -----	15.8	23.5	1 890.4	474.7	.079	.124	.727	.004
Arkansas -----	9.7	16.5	1 493.5	177.2	.126	.215	.368	.006
California -----	9.7	22.9	1 460.5	236.2	.125	.168	.568	.007
Colorado -----	9.9	26.7	1 847.5	387.0	.105	.193	.615	.006
Connecticut -----	7.7	24.2	1 470.0	257.5	.122	.205	.461	.005
Delaware -----	9.6	15.6	1 676.9	188.4	.163	.217	.570	.003
District of Columbia -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)
Florida -----	16.4	19.8	1 712.5	196.5	.132	.225	.561	.009
Georgia -----	10.8	19.7	1 447.4	201.7	.136	.198	.513	.007
Hawaii -----	93.6	35.2	1 872.6	306.2	.147	(D)	.572	.005
Idaho -----	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(S)
Illinois -----	9.4	26.6	1 480.7	218.3	.186	.177	.594	.006
Indiana -----	9.6	20.3	1 558.4	174.3	.152	.298	.438	.004
Iowa -----	8.7	16.6	1 555.3	153.4	.131	.326	.431	.006
Kansas -----	9.4	18.6	1 760.9	222.4	.099	.202	.648	.002
Kentucky -----	8.8	16.2	1 512.3	129.3	.152	.235	.437	.007
Louisiana -----	8.9	17.1	2 056.8	156.7	.146	(D)	.430	*.008
Maine -----	9.3	20.4	1 311.7	159.4	.156	(D)	.410	.008
Maryland -----	10.5	20.1	1 574.6	197.1	.125	.200	.497	.006
Massachusetts -----	11.8	29.4	1 825.7	318.3	.132	.194	.588	.009
Michigan -----	7.7	19.2	1 674.0	161.1	.162	.280	.386	.005
Minnesota -----	9.4	30.9	2 019.3	382.9	.114	.230	.541	.006
Mississippi -----	8.7	13.5	1 466.3	186.2	.089	.184	.544	.008
Missouri -----	6.5	17.5	1 539.4	202.1	.108	.317	.479	.004
Montana -----	5.7	19.8	1 347.1	271.5	.096	.247	.511	.002
Nebraska -----	11.0	22.5	1 466.2	207.3	.144	(D)	.586	.003
Nevada -----	13.3	34.7	1 868.1	411.4	.099	.125	*.737	.004
New Hampshire -----	10.9	20.0	1 745.7	144.5	.172	.252	.412	.006
New Jersey -----	6.3	22.7	1 679.6	177.2	.167	.262	.430	.010
New Mexico -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
New York -----	8.8	21.4	1 578.6	200.2	.144	.208	.494	.009
North Carolina -----	11.3	16.0	1 710.9	170.1	.122	.257	.501	.008
North Dakota -----	11.8	20.6	2 042.6	223.1	.121	.251	.460	*.006
Ohio -----	10.8	19.0	1 481.5	188.6	.149	.207	.479	.008
Oklahoma -----	6.0	14.0	*1 117.3	157.6	.124	.143	.538	.008
Oregon -----	7.0	15.8	1 016.8	147.0	.137	.249	.523	.005
Pennsylvania -----	7.3	17.0	1 644.0	122.2	.180	.263	.401	.007
Rhode Island -----	7.5	24.9	2 118.1	357.4	.104	.174	.615	.004
South Carolina -----	19.7	18.4	1 723.8	189.7	.120	.299	.523	.010
South Dakota -----	36.6	13.6	1 787.8	200.6	.080	(D)	.469	.003
Tennessee -----	14.6	20.3	1 841.2	261.8	.099	.246	.521	.011
Texas -----	9.7	19.1	1 474.3	218.4	.122	.239	.502	.008
Utah -----	4.0	16.7	1 630.5	157.7	.148	.406	.222	.008
Vermont -----	5.8	16.7	1 094.8	150.3	.148	.339	.376	.006
Virginia -----	12.9	18.0	1 701.6	215.5	.128	.250	.510	.007
Washington -----	7.0	18.8	1 366.7	213.8	.115	.247	.471	.007
West Virginia -----	7.4	15.1	1 421.3	110.3	.177	.313	.372	.008
Wisconsin -----	11.6	21.0	1 541.9	201.0	.133	.208	.537	.004
Wyoming -----	*5.9	*15.4	*631.6	*112.5	*.154	*.364	.295	(D)

APPENDIX A.

Explanation of Terms

Construction—Is composed of three broad categories:

1. **New construction**—Includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators, and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations or reconstruction**—Includes construction activity making structural changes to existing facilities. Generally, this type of activity is considered a capital investment in the property.
3. **Maintenance and repair**—Includes construction done for the purpose of upkeep of property rather than additional investment in the property.

Examples of the general distinction between maintenance and repair and reconstruction are provided here: roof repairs, including the replacement of shingles, gutters, etc., are classified under maintenance and repairs. A complete reroofing, however, is classified as reconstruction.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

All employees—Comprise all full-time and part-time employees on the payrolls of construction establishments, who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

Construction workers—Includes all workers up through the working foreman level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment

operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working foreman level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1987.

Payroll—Includes the gross earnings paid in the calendar year 1987 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Employer costs for fringe benefits (supplemental labor costs)—Represents expenditures made by the employer during 1987 for legally required and voluntary fringe benefit programs for employees.

Legally required contributions—Include Social Security contributions, unemployment compensation, workman's compensation, and State temporary disability payments.

Voluntary payments—Include life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

Value of construction work done—Includes all value of construction work done during 1987 for construction work performed by general contractors, special trades contractors, subcontractors, and land development and improvement work. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include the value of buildings and other structures built or being built for sale in 1987 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators, etc., were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in the value of construction work done.)

Other business receipts—Includes business receipts not reported as value of construction work done or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

Net value of construction work—Derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted to others, and costs for materials, components, supplies and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, land receipts are also subtracted from dollar value of business done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

Selected costs—Represents the costs for materials, components, and supplies; costs for construction work subcontracted to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1987 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)
- freight and other direct charges should represent only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, are included in this item as are costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment, such as printing presses; computer systems; etc., which are not an integral part of a structure
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted to others include:

- all costs during 1987 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- The costs to the reporting establishment for its purchases of materials, components, and supplies, provided to a subcontractor for his use. Such costs are reported under a separate category, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal and coke products, etc.

Rental costs for machinery, equipment, and buildings—Includes all costs during 1987 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It

excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

Selected purchased services—Includes all costs during 1987 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies, or from other establishments of the same company. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property, or the cost of adapting it for another use. Such costs are included in "capital expenditures".

Assets and depreciation—Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and, (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1987.

Capital expenditures—Refers to all costs actually incurred during 1987 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1987.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

Inventories—Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to report work in progress and finished units not sold for buildings and other structures built for sale.

Inventories of multi-establishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Ownership of construction projects—This item shows the distribution of the value of construction work done by ownership of the project, that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal, and State and local governments.

Value of construction work subcontracted in from others—Includes the value of construction work during 1987 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1987. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose, i.e, office and residential, or commercial, they were to classify the building by major purpose.

In addition all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (include townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures containing two or more housing units (excluding attached single-family houses and townhouses described above).
- **Hotels and motels**—Includes hotels, motels, and tourist cabins intended for transient accommodations.

- **Other residential buildings**—Includes dormitories, fraternity and sorority houses, nurses homes, and other nonhousekeeping residential structures.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more.
- **Other commercial buildings, such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are not included in this category, but under nonbuilding construction.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes nonresidential buildings which are not classified elsewhere, such as fire stations, prisons, civic centers, bus and air passenger terminals and hangars.

Nonbuilding construction:

- **Highways, streets and related work, such as installation of guardrails, highway signs, etc.**—Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Recreational facilities**—Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Bridges and elevated highways**—Includes viaducts and overpasses; roads, highways, railroads, and causeways built on structural supports.
- **Tunnels**—Includes highway, pedestrian, and railroad tunnels.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, levees, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities**—Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants, and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers, and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.

- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

APPENDIX B.

Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Powerline Construction	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting and Paper Hanging Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified
		6552	LAND SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES

APPENDIX C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

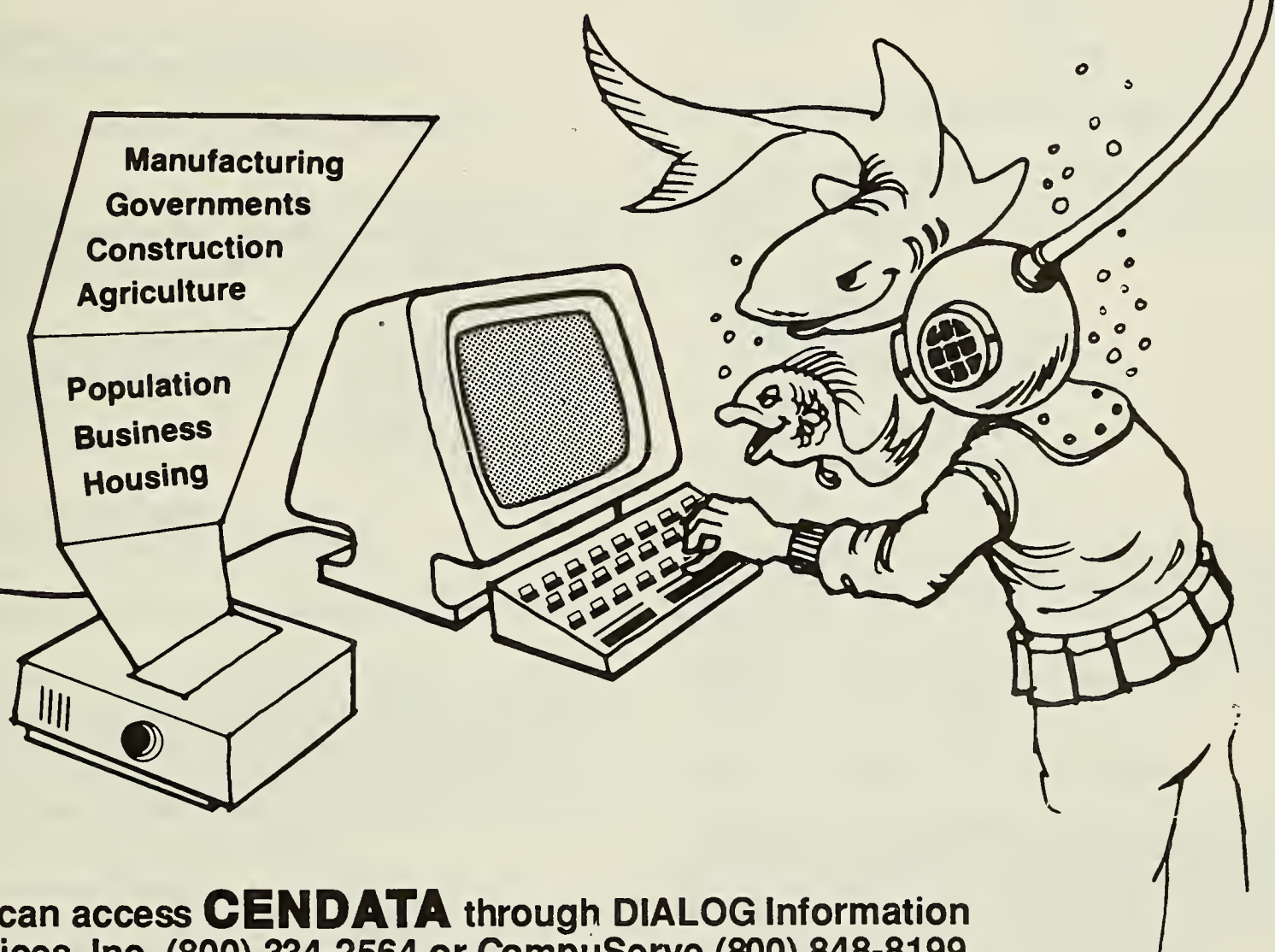
Alaska
California
Hawaii
Oregon
Washington

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PUBLICATION PROGRAM

1987 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)
- Land developers and subdividers

Data products in the Census of Construction Industries are issued in 4 publication series and in 3 other media:

- Printed reports [P]
- CD-ROM [C]
- Computer tape [T]
- Highlights online [+]

Preliminary Industry Series (CC87-I-1(P) through CC87-I-28(P))

(Available November 1988 through May 1989) [P]

Twenty-seven separate industry reports and a United States summary report, providing national statistics for establishments with payroll. Statistics shown for 1987 include:

- Number of establishments
- Number of employees
- Payroll
- Hours worked
- Value of construction work done, by type of structure
- Selected operating costs

Final Industry Series (CC87-I-1 through CC87-I-28)

(Available June 1989 through November 1989) [P] [C] [T] [+]

Twenty-seven separate industry reports and a United States summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

Geographic Area Series (CC87-A-1 through CC87-A-10)

(Available January 1990 through March 1990) [P] [C] [T] [+]

Nine reports on the construction industries, representing each census geographic division, and a United States summary report. Regional reports provide detailed data for States and metropolitan statistical areas.

Subject Report—Legal Form of Organization and Type of Operation (CC87-S-1)

(Available May 1990) [P]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

OTHER ECONOMIC CENSUSES REPORTS

The Census of Construction Industries is part of the 1987 Economic Censuses. These are conducted at five-year intervals in years ending in 2 and 7 and consist of seven separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the Census of Outlying Areas, including separate economic censuses of Puerto Rico and other outlying areas. The Census of Agriculture and Census of Governments are conducted separately.

HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233. If you have any questions, call Census Customer Services 1-(301)-763-4100.



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CC87-1-2

General Contractors—Residential Buildings, Other Than Single-Family

1987 Census of C

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Industries